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July 8, 1995

Office of the Secretary
Federal Communications Commission
Washington, DC 20554

RE: RM-8653

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Gentlemen:

Enclosed are an original and 9 copies of comments on the above referenced Petition for Rule Making. These comments are made on behalf of the Northern Amateur Relay Council of California, Inc., a voluntary association of over 250 owners of fixed and mobile relay stations in Northern and Central California.

We appreciate your consideration of our position and concerns on this important matter.

Yours, truly,



Carl Guastaferrero
Director

CCG/cg

enclosures

Before the
Federal Communications Commission
Washington, DC 20554

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FCC MAIL ROOM

In the Matter of

Allocation of Spectrum in the 5 GHz Band
To Establish a Wireless Component of the
National Information Infrastructure

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COMMENTS OF THE
NORTHERN AMATEUR RELAY COUNCIL OF CALIFORNIA, INC.

by

Its Spectrum Director

Carl Guastaferrro

July 8, 1995

Before the
Federal Communications Commission
Washington, DC 20554

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TO: The Commission

Comments

I. INTRODUCTION

1. The Northern Amateur Relay Council of California, Inc. (NARCC) is a voluntary association of over 250 owners of Amateur Radio Service fixed and mobile relay stations in Northern and Central California. NARCC grew out of the original California Amateur Relay Council. It was formed in the early 70's in response to the desires of repeater and remote base operators to mutually coordinate channel assignments.

2. NARCC is recognized as the official coordinator for all repeater sub-bands in our area for frequencies 28 MHz and above. Our Board of Directors hold monthly meetings, we publish a quarterly newsletter, our general membership meets semi-annually and we publish an annual directory of our repeater database. We along with our Southern California counterpart, SCRRBA, are active in the band planning process. Our database and current band plans are on file with the American Radio Relay League, Inc. (ARRL). Our comments presented here concern the Apple Computer, Inc. petition for a new allocation in the 5725-5875 MHz Band. Currently, the Amateur Radio Service shares the 5.65-5.85 and 5.85-5.925 GHz Bands with Government Radiolocation and Industrial, Scientific and Medical Equipment. We are therefore concerned about the prospect of potential interference and possible elimination of the above referenced band segment from the Amateur Radio Service.

II. BACKGROUND

3. Apple Computer petitioned the FCC for spectrum for a data-PCS network back in 1991. They ultimately lost the war but won a few battles and were awarded some frequencies in the 2.4 GHz Band.

4. The Omnibus Budget Reconciliation Act is in the process of transferring significant blocks of spectrum from Government to the Private Sector. The bidding process will generate considerable revenue. The proposed petition "flies in the face" of the ongoing reallocation process. Apple is requesting 300 MHz of prime spectrum for yet to be designed unlicensed networking of computer devices.

III. DISCUSSION

5. A great deal of effort has gone into the petition. Its goals are noble, with lots of "Motherhood" and "the needs of the many outweigh the needs of the few" statements. We at NARCC have no doubt that a National Information Infrastructure will be a reality in the not-too-distant future.

6. Our concerns are based on Apple's choice of frequencies we are actively using. More on this later. Rather than try to work within existing allocations, they are once again trying to take the easy road and are asking for new frequencies.

7. As has been the case recently, proposed applicants for spectrum that must be shared with other services are conspicuously silent on interference criteria and can offer little or no evidence of actual testing to support their claim that coexistence is possible. This comes as no great surprise, since the devices that are to operate in the new services do not yet exist. We therefore feel that an award of such a huge chunk of prime spectrum is premature and is not likely to serve the Public Interest.

8. In prior comments made for preservation of the 2.3-2.45 GHz Band, we have given the Commission a summary of the work we do for the Public and our activity levels, both present and future. We do not plan to take up your time revisiting that area. Our comments are a matter of public record and the commission has acknowledged the importance of the services we provide.

9. We will, however, offer some specifics of amateur activity in the 5.8 GHz Band in our area. As Apple is headquartered here, they are no doubt aware of these activities and have chosen to ignore them. Once again, the general statement appears in their petition that the proposed band is lightly used.

III. 5.8 GHZ OPERATIONS IN NORTHERN CALIFORNIA

10. A group of several amateurs in the Northern California area have been active in the 5.8 GHz region for nearly 25 years. The activity spans most of the north half of the state as well as mobile and portable usage in the remainder of the state. The activity consists of more than 15 full duplex point-to-point microwave systems operating in continuous duty and 3 mobile/portable point-to-point systems operating as required. The fixed systems connect several traditional amateur facilities together for repeater linking, as well as full-motion television and multiplexed telephone

line delivery. Many of the FM systems in our area have phone patch capability only because the 5.8 GHz links deliver it to them.

11. The television and telephone circuits were heavily used during the Oakland Hills fire in 1991. The California Office of Emergency Services (OES) has been a main beneficiary of the mobile and portable portions of the network. These systems have been deployed in numerous exercises and drills at the state and local level. They are listed as available communications resources which can be deployed anywhere in the state.

12. Although NARCC does not have the specifics, it is our understanding that a similar system not only exists in Southern California but is in the process of a major expansion, thanks to an infusion of a large number of 6.5 GHz FDM microwave links acquired from a government agency. These can be and are being re-tuned to the 5.8 GHz Band. They will be of great benefit by providing a much needed "backbone system" for relaying voice, data and control channels. That traffic is currently contributing to the tremendous congestion in the UHF Bands.

13. These are but 2 examples of our ongoing evolution of consolidation and migration to the higher bands. Our future is there.

IV. CONCERNS ABOUT THE APPLE PETITION

14. We feel confident Apple knows about our 5.8 GHz activities. They haven't actually said it but if you read between the lines, coexistence is not likely. Thus, for their system to work, our activity must cease.

15. The apple system cannot function under Part 15 guidelines. Their performance goals require reliability numbers that preclude the low power and antenna limits imposed by Part 15. Hence their request for a new set of guidelines which they refer to as Part 16.

16. They are asking permission to create a proprietary network without paying for it. Other wireless carriers have paid unprecedented sums for our precious spectrum. If they take the lead role in defining a transmission system, it would then be patented and licensed to other users. Nothing wrong with that but their entry into the spectrum cost them nothing.

17. Apple has chosen to ignore the extensive use of this band by the military. Their high-power shipboard radar tears up our 5.8 GHz links whenever they arrive and depart our coastal region. We can tolerate this because we are secondary users and know that the Navy is not willfully disrupting our services.

18. Apple has not solicited input from other users with regard to specifications and interference considerations in the 5.8 GHz Band. Perhaps it is because it is their intention to occupy the band exclusively.

VI. CONCLUSIONS AND RECOMMENDATIONS

19. Apple has chosen a path to indirectly displace long-standing currently allocated usage if their petition is put into law. The Public Interest would be better served if they "worked within the system" and utilized existing allocations.

20. We at NARCC respectfully request that the Commission dismiss the Apple petition. For reasons stated above, it appears to be an attempt to circumvent the ongoing work by the Commission to reallocate and auction off spectrum in the Public Interest. Apple has clearly not researched the level of existing activities in the band nor do they suggest any means of relocating the existing users.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Carl Guastaferrro". The signature is fluid and cursive, with a large, stylized initial 'C' and a long, sweeping underline.

Carl Guastaferrro
Spectrum Director
Northern Amateur Relay Council of California Inc.